

Listeria Oxford Agar

Selective medium for the detection of *Listeria monocytogenes*

Formula in grams per liter:

Columbia Agar base	39,00	Lithium Chloride	15,00
Esculine	1,00	Ferric-ammonium Citrate	0,50

Final pH: 7,2 ± 0,2 at 25 °C

Preparation:

Suspend 27,75 grams of medium in 500 ml. of distilled water. Heat with frequent agitation until complete dissolution. Distribute into appropriate containers. Sterilize in autoclave at 121°C (15 lbs. psi) during 15 minutes. Cool to 50°C and aseptically add the reconstituted supplement .

Uses:

The selective medium for *Listeria* according to the Oxford formula is recommended for the detection of *Listeria monocytogenes* from clinical samples and food products. The medium uses Lithium chloride as an inhibiting agent as well as other supplements which inhibit the growth of Gram negative bacteria and a large part of Gram positive ones.

The system indicator is esculin and iron for isolation and differentiation of *Listeria*. *Listeria monocytogenes* hydrolyses esculin to esculetin forming black complexes. Apart from that, *Listeria monocytogenes* produces greenish brown colonies with a black zone.

Microbiological Tests:

Microorganisms	Growth	Colony color
<i>Listeria monocytogenes</i> ATCC 19117	Good	+
<i>Staphylococcus aureus</i> ATCC 25923	None	-

